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REPORT

OF A

PUBLIC MEETING

HELD AT THE VICTORIA ROOMS, ON FRIDAY, 10 JANUARY, 1868,
TO SUPPORT

THE UNION

OF THE

Bristol Philosophical Institution,

AND

Bristol Library;

COMPRISING VARIOUS SUGGESTIONS BY THE SPEAKERS FOR THE
PROMOTION OF

Scientific and Technical Education.



BRISTOL:

J. WRIGHT & CO., PRINTERS, THOMAS STREET.

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OF THE

AMERICAN

ASSOCIATION



NEW YORK

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Held at the Victoria Hall, on Friday, 12th January, 1906

THE UNION

Bristol Philosophical Institution

Bristol Library

Printed by the Bristol Philosophical Institution, 11, Queen's Road, Bristol

Second Edition, 1906

Price 1s. 6d.

By the Bristol Philosophical Institution

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REPORT.

ON Friday, January 10th, a large and influential meeting was held in the Victoria Rooms, for the purpose of explaining and exciting more general interest in the movement for amalgamating the Bristol Philosophical Institution and Bristol Library, and erecting a new building for that purpose in the Queen's Road. The Right Worshipful the Mayor, Francis Adams Esq. presided, and there was a numerous attendance. Amongst those present were Major-General Sir Henry C. Rawlinson, K.C.B., M.P., &c.; Dr. Acland, Regius Professor of Medicine in the University of Oxford; Mr. Henry Cole, C.B., Director of the South Kensington Museum; Mr. E. A. Freeman, M.A., late Examiner in Modern History in the University of Oxford; Mr. John Phillips, M.A., LL.D., &c., Professor of Geology in the University of Oxford; the Right Rev. Bishop Anderson, the Very Rev. the Dean of Bristol, Rev. Canon Knight, Dr. Symonds, Mr. W. Sanders, Rev. W. James, Mr. T. Pease, Mr. S. W. Browne, Mr. J. Norris, Mr. Lewis Fry, Mr. W. P. King, the Rev. Precentor Poole, Mr. C. J. Thomas, Dr. Budd, Mr. F. Fry, Mr. R. Fry, Mr. R. Lang, Mr. J. Hare, the Rev. E. I. Gregory, the Rev. M. Brock, Mr. W. Terrell, Mr. S. H. Swayne, Dr. Swayne, Mr. C. Tovey, Mr. C. Greig, Mr. W. K. Wait, Dr. W. B. Herapath, Dr. Beddoe, Dr. F. H. Fox, Dr. E. L. Fox, Dr. C. H. Fox, Mr. C. S. Clark, Mr. W. L. Carpenter, Mr. W. Proctor

Baker, Mr. A. F. Woodward, Mr. Sheppard, Dr. Martyn, Dr. Fripp, Major Austin, Mr. J. G. Reynolds, Rev. I. S. Gale, Mr. T. Kerslake, Mr. Herbert Thomas, Mr. T. Hawkins, Mr. J. Stephens, Mr. J. Harford, Admiral Hay, Dr. Marshall, Mr. Ward Jackson, Mr. F. P. Lansdowne, Mr. W. Budgett, Mr. A. Phillips, Rev. T. H. Clarke, Rev. G. Crewdson, &c., &c. The Mayoress and a large number of ladies were also present.

The MAYOR in opening the proceedings said, that in compliance with the request of a number of his most respected fellow-citizens, he appeared before them that day in the hope, and with the intention of forwarding the most desirable object for which they had assembled (hear, hear). He was convinced from the manner in which it had been taken up by the respectable body of men whom he saw around him, that the scheme would be carried out thoroughly (hear, hear). He begged to call upon the Rev. Edmund Gregory to read letters of apology from gentlemen who were unable to be present.

The REV. E. I. GREGORY (one of the Hon. Secs.) then read letters from Mr. H. A. Palmer, Mr. James Ford, and Mr. J. B. Atkinson, the first of whom enclosed a cheque for £250, being the first half of his donation of £500 towards the object. The rev. gentleman said that letters had also been received from Sir Roderick Murchison, Mr. Ralph Neville Grenville, M.P., Mr. Robert Bright, Mr. W. H. Wills, and others, expressing their approval of the object of the meeting, but stating their inability to attend. He also mentioned that Dr. W. B. Carpenter would have been present but that his duties at the London University prevented his attendance.

MR. LEWIS FRY (another of the Hon. Secs.) then read the following report:—

The Bristol Institution for the Advancement of Science, Literature, and the Arts was founded in the year 1823. As far back as 1809 a body of gentlemen had formed a Philosophical Society, and projected the erection of a building for scientific and literary purposes. The project was not, however, carried into effect until 1820, when the foundation stone of the present edifice in Park Street was laid, and upon its being ready for use in 1823 the existing Institution was founded and the building made over to it. The objects of the Institution were declared to be:—1. The diffusion of useful knowledge by lectures. 2. The provision of a philosophical apparatus for the use of the lecturers and such members as might be desirous of prosecuting scientific inquiries. 3. The formation of a museum for objects of natural history, including zoology, comparative anatomy, botany, geology, &c. 4. The establishment of reading-rooms, where the leading journals of science and other periodical publications should be provided for the use of the members. 5. The exhibition of pictures, statues, casts, and other objects of the fine arts, and of antiquities; also of machines and models in the useful arts, and the preservation of such as might be presented to or deposited with the Institution. 6. The formation of a society for the culture of science and literature. The limits of this statement will not permit a detailed history of the progress of the Institution, but it is impossible to omit paying a well-deserved tribute to the public spirit, energy, and taste of its founders, some of whom still survive. The result of their labours and of their generosity is seen in the beautiful building they erected, and in the noble collections of works of science and art which they commenced; and if, after the lapse of nearly half a century, we propose to make some changes in that which they established, we rejoice to believe that we are working in the same spirit which actuated them, and building on the foundation which they laid. To select particular names from those prominently connected with the work would be difficult, where so many deserve honourable mention; but, in the presence of the distinguished representatives of science who favour us with their help to-day, we cannot omit to mention the names of Dr. Prichard, Sir H. de la Beche, Dr. Riley, Dean Conybeare, and Dr. W. B. Carpenter, as having been connected with the studies of the Bristol Institution.

The Bristol Library was commenced at a much earlier date than the Institution, and has been in existence little short of a century. The meeting which led to its establishment was held in December, 1772, and shortly afterwards a society was founded for the purpose of forming a subscription library, and appears to have received general support from the principal citizens of the day. The library was situated in King Street until the year 1855, when it was removed to the present rooms near the top of Park Street, which are held by the Society on a yearly

tenancy only. The collection numbers about 25,000 volumes, and is estimated to have cost about £15,000. It cannot be doubted that its existence has had considerable effect in keeping alive the literary tastes and pursuits of the neighbourhood, and the names of many illustrious men occur upon its list of members, of whom it may suffice to mention Samuel Taylor Coleridge, Robert Southey, and Sir Humphrey Davy.

It might have been supposed that the two Institutions, the origin of which has thus been sketched, would surely enjoy a long career of prosperity, and that each succeeding generation would feel a pride in maintaining and improving what the public spirit and literary or scientific tastes of their predecessors had handed down to them. But experience has sadly falsified such an anticipation, and it must be acknowledged that for many years a most inadequate support has been given by the public to both Institutions. Time will not allow a detailed discussion of the reasons of their decline. Somewhat may be due to general causes—to the circumstances that works upon scientific and literary subjects are now obtained at a much lower cost than heretofore, and to the increase of circulating libraries; but we fear that if we look to other large places where such institutions as those now before us are supported with spirit, it must be confessed that our community exhibits a peculiar apathy in regard to the importance of maintaining amongst us adequate means and facilities for literary and scientific culture.

It is interesting to notice that at the time of the erection of the building in Park Street it was contemplated that the Library might possibly be removed to it. The trust deed of the Institution contains provisions for devoting part of the building to the use of the Bristol Library Society, and the large room was designed for the reception of the books. It is thus clear that the union is in accordance with the views of the founders of the Institution.

The present proposal to unite the two Institutions arose from the circumstance that the supporters of the Library, wishing to increase its resources by freeing its funds from the burthen of annual rent, resolved to raise a fund for the erection of a building to be devoted to its reception, and having succeeded in obtaining a considerable amount for the purpose, some of them, who were equally interested in the prosperity of the Philosophical Institution, were naturally led to consider whether at the same time some effort might not be made to revive its diminished popularity and usefulness, and the idea of uniting the two Institutions in a new building naturally suggested itself. The purpose for which the Library was founded—the promotion of literary culture—is one of the objects embraced by the Bristol Institution, and although the latter has never acquired a library of general literature, it possesses a collection of books of considerable value relating to scientific subjects, which might appropriately be united to that of the Bristol Library. The advantages of union, where the objects are kindred, are sufficiently obvious. The vitality of each branch of an institution is to some extent communicated to the whole body, and the interest attaching to each has a tendency to extend

itself to the whole. By union, too, we hope to render the management more easy and less costly, and to be able to admit the public to the benefits of the united institutions at a less payment than is now required for access to both separately. It may be asked, why should we quit a building in many respects so suitable and raised at so large a cost as that in Park Street? The reply is that, in the 47 years which have elapsed since its erection, changes have taken place in our ideas, habits, and requirements which render it no longer so desirable an abode for our Institution as it was when the taste and public spirit of its founders gave it existence. The lecture-room, though constructed on the best design of the day, falls short of the present standard of comfort and convenience; and the circumstance that the Institution is situated at the bottom of Park Street, whilst the population from which it must draw support has moved into the suburbs, is thought to form a considerable obstacle to a good attendance at lectures and other meetings. But the requirements of our Museum form the strongest argument in favour of removal. Some of our distinguished visitors will probably remind us of the value of our noble collection of objects of science, in some respects unrivalled by any other out of the metropolis. But we lack one essential requisite for using our treasures—space to display them properly to the public view. The museum, indeed, requires at least double the accommodation afforded by the rooms which it at present occupies.

It now becomes proper to advert to the steps which have already been taken towards carrying the proposed union into effect. In the first place, a site has been secured for the new building, the advantages of which are incontestable, and which has met with general approval, as one of the best in the neighbourhood. It is well known, as adjoining the headquarters of the Rifle Volunteers in the Queen's Road. In the next place, after great care and consideration, a design has been selected, which the committee believe will, if carried into execution, give to our city a noble edifice in every way worthy of the purposes to which it is to be devoted. It was also necessary to obtain the legal sanction of the proprietary body of each of the institutions concerned in the amalgamation, provision for which has been made by the legislature in an Act of Parliament passed in 1854. For this purpose a special meeting of each body was held some months ago, when the proposal was discussed and approved, and subsequently another special meeting of each body was convened, at which the proceedings of the former meetings were confirmed. On these occasions the proposal for amalgamation was adopted unanimously, except at one meeting, at which there were two or three dissentients.

There thus remains no obstacle to the completion of the undertaking except the insufficiency of the pecuniary support hitherto given to it by the public. Upwards of £6,000 has been already subscribed, and it is estimated that the sale of the Park Street building and some other sources will produce a further sum of £6,000, making an available total of £12,000. Finding that the completion of the entire design would involve an outlay greatly in excess of this amount, the committee recently pro-

posed to omit for the present that portion of the building which would front the Queen's Road, and to proceed with the remainder, to which access can be obtained from a new road to be opened along the north side of the building. They are, however, sensible that this proposal has not met with general approval, and they earnestly hope to be placed in a position to erect the front and most conspicuous portion of the edifice. As the entire design will afford greater accommodation than the united institution will at first render necessary, it is now proposed to omit certain rooms in the rear, which may hereafter be added, if needful. The cost of the building thus reduced, including the purchase of the site, cannot be reckoned at a less sum than £17,000, so that the committee have to appeal to those who may feel the importance of their undertaking for a further sum of £5,000, and when they regard the nature of the object in view, the size and wealth of our community, and the comparatively small number of persons who have yet contributed, they feel that there ought not to be any considerable difficulty in raising the sum required.

The Philosophical Institution and the Library were both formed upon the principle that the management should be vested in a body of shareholding proprietors. Each institution has, however, adopted regulations by which subscribers not being shareholders are admitted to its full benefits on equal terms with the shareholders. The promoters of the present movement are most desirous to give to the new united institution as strictly a public character as possible, whilst they believe that its efficient maintenance and management will be best promoted by retaining the proprietary principle. And with the view of diffusing as widely as possible the benefits of a scientific and literary education, they propose that the museum shall be open to the general public free of charge on certain days of the week, and that regulations shall be framed for the admission to the library, either gratuitously or at a reduced payment, of students to whom the ordinary rate of subscription might be an obstacle. It is also intended that the rules shall provide against the sale of the property of the Institution for the purpose of making any division of profit amongst the shareholders. It should be added that the committee would rejoice to see a museum for instruction in practical art and science as a part of the Institution, and would earnestly promote its formation should the means at their disposal suffice for an object, which they regard as most important.

The committee feel that it is not necessary to conclude this statement with any lengthened appeal to the public for support. The claims of their undertaking, as a part of the great cause of education, they leave with confidence to the advocacy of the distinguished men who have kindly consented to address the meeting on this occasion, and they earnestly trust that, for the honour of Bristol, that advocacy may be as efficacious as they are sure it will deserve to be, and that it may be shown that the citizens of our own day are not less alive than their predecessors to the importance of literary and scientific pursuits, nor less willing to provide a suitable edifice for their culture.

PROFESSOR PHILLIPS, M.A., LL.D., then rose to move the first resolution, which was as follows:—"That regarding the existence of public institutions for the promotion of science, literature, and the arts, as essential to the intellectual culture of a large community, this meeting regrets the decreased support and encouragement which have of late years been given to the Bristol Institution and the Bristol Library Society." He said the purpose of that meeting, which had been laid before them in the report just read with so much clearness, simplicity, and truth, must have undoubtedly commanded the sympathy of all persons, whether resident in Bristol or not, who valued well arranged establishments for the higher branches of popular education, and who were aware of the high place in public estimation held for so many years by the scientific and literary institutions in Bristol, which it was now proposed to make more efficient by giving them the mutual aid which the union of the two appeared likely to furnish (hear, hear). To himself, who had the pleasure forty years since of becoming acquainted with some of the eminent men who had honoured Bristol by their residence, and had advanced science by their research, it was matter of sincere pleasure to be permitted in any manner to take part in the attempt to benefit institutions in which formerly it was possible to hear the voice of such a man as Dr. Prichard (applause); institutions which were favoured by Dean Conybeare (applause); and in which were specimens that had been handled by Sir Henry de la Beche (applause). He had had the opportunity, too, of making the acquaintance in the institution of some of those men who had been most useful in Bristol, and who deserved to be most highly honoured, such as his friend, Mr. Sanders (applause), Mr. Stutchbury, and Mr. Miller, the distinguished author of the book on "Fossil Encrinites"

(applause). He was happy indeed to take any share in a movement of this kind, and to propose the resolution which had been put into his hand, notwithstanding that it contained an allusion to a circumstance which he scarcely knew how to think possible to happen in Bristol. He found when he read the resolution there was a statement in it, that those great establishments in Bristol, which had been accepted for a long time as honourable to their country, and highly beneficial to society, had not been, of late years, supported by the inhabitants as they ought to have been (hear). He did not know how to profess pleasure in making such a statement, but he was happy to assist them in any way (applause). Now he was not prevented by the circumstance of his being comparatively a stranger in Bristol, from expressing his hearty sympathy in the purport of the resolution. He was sure that no person could possibly have any reason for doubting that they were all agreed upon the first part, namely, the importance of institutions of that kind to the intellectual culture of a large community; and he was justified in expressing his regret that it should have been found necessary to employ the terms used in the second part of the resolution. But nothing would induce him to consent to express a syllable of regret touching the past history and present character of institutions which he had known to be so highly beneficial, and which if they had received a less amount of support than formerly, had not in any respect changed that liberal and high character which they had always held. He was able to say that at that moment he had in his possession at Oxford, out of the Bristol Institution, a series of organic remains which could have been got from no other institution in England; and if they could have been obtained, he did not believe that there were many institutions in

the country which would have had the liberality to send him those specimens (applause). No doubt the officers who had produced the statement which had been read, did feel the regret which it expressed, and no doubt the gentlemen then present—he was sure that it could not be the case with the ladies, for they could not regret a thing of that sort in which they had no share—but he thought the gentlemen might reasonably regret that state of things. He considered that they ought, however, to express their regret with great courage and confidence, because the circumstance which had occasioned that regret was a thing which could be so easily removed (applause). Now he was persuaded that they ought not to have any feeling of discouragement, for if they went into any part of the kingdom and inquired into the condition of institutions of that character, they would find that during the last twenty years there had come over them a feeling of reduced activity—he would not say indolence, nothing of that sort—and one reason for that would suggest itself to every person, and that was that thirty or forty years since a great effort was made to establish these institutions. No doubt the scale on which they were established was sufficient for the time, but as time went on, as London became more accessible, and as institutions of the South Kensington kind were established in the metropolis, additional opportunities were afforded for studying science in London, and the provincial institutions became less attractive. There were many who went abroad and studied the Alps, and who on returning home would never look at the beautiful scenery amongst their own mountains and lakes; and there were many who went to the British Museum and came back and said their own museum was a very small affair. The great public institutions had their proper duty, and provincial institu-

tions had some other but not less important duties. Never let provincial institutions be thought of less value than the great establishments in the metropolis, for they afforded better opportunities of study in some departments, and would teach them better the works of nature in their own neighbourhood (hear, hear). One of the great mistakes of local museums was that they received everything which was sent them. Somebody went to the South Sea Islands, or to Patagonia, and brought home some war clubs; somebody picked up a stone here, and a piece of mineral there, and they all found a home in the provincial museum; but what they wanted was to collect every plant, every mineral, every fossil, in their own neighbourhood—to have a complete history of every thing that concerned their own physical geography (hear, hear). Within the walls of the Bristol Institution was the best collection of fossils to be found in the West of England—they had a matchless collection of specimens from Dundry Hill, and there were many other collections from the neighbouring country, showing that this particular duty had never been neglected by the managers of the Bristol Institution (applause). One thing more which might account for the reduced activity of provincial institutions, was that public attention had to a great extent been diverted to great educational questions, and there had been produced a very considerable difference of opinion as to whether men should cultivate literature more or science more, and a singular and unexpected antagonism had been produced between men devoted to literary studies and those devoted to the study of nature. The conclusion, however, now rapidly hastening to be adopted by the public mind was that each of those studies should be cultivated to the fullest extent, and opportunity must be taken to render them as useful as possible by combining the two researches—

they must give to each a free and hearty development, and join the two together for the benefit of the community (hear, hear). What did they call science? What was it but the result of human thought, observation, and discovery employed on natural phenomena? and what did they call literature if it did not contain the record of human thought, observation, and discovery (applause)? Who would pride himself upon some new discovery in nature, shut it up in his own mind, and not impart it to the world? But that which was thus imparted became literature, and he could not for a moment believe that the good sense of the country would ever divorce the highest form of classical literature from the highest form of physical study (hear, hear). He was the more encouraged in believing that they would carry out their object by something which he read the other day. He happened to possess a book which contained an account of the institutions of Bristol, and he opened it at a page which declared that in the year 1619 Robert Redwood had the foresight to establish a library in this city; and that a hundred years afterwards the Rev. Joseph Catcott, a student of nature, who had collected a quantity of organic remains, presented them to that library, and likewise left it a large collection of books. When that was done so long ago, and when he knew that a friend of his own, then present, had been the happy instrument of joining at Oxford two institutions—each of which was doing good, and would do more—when he knew that the great Radcliffe Library and magnificent University Museum, which had been working separately, had been placed together, and became the working means of the students at Oxford in physical science; when he knew that that had been done by his honoured friend, Dr. Acland (applause), he felt that they were proposing here what was satisfactory to Bristol 250

years ago, and what would he believed be very satisfactory to Bristol now (applause), and if three or four years hence they were to do him the honour of inviting him to the opening of a united institution, then he would be glad to know that they were carrying out a scheme which had the sanction of the highest authority in England (applause).

MR. E. A. FREEMAN said that he also shared the mingled feelings of pleasure and regret which Professor Phillips had referred to, in speaking to the resolution. He felt a great pleasure in being able to do anything in aid of the object they had in view ; and as he had had something to do with their Institution, he might express his regret at its neglect by the city, and he could confirm from his own experience that which the Professor seemed to doubt. He came before them in a sort of middle position—between those who belonged to them and those who had nothing whatever to do with them. There must be some to whom he was not altogether a stranger—the small, but he hoped select, class who occasionally attended the lectures at the Philosophical Institution. For some years he had had the pleasure of coming year by year to say any little matter he might have to say to them, but it was discouraging to have to preach to such small audiences—almost empty benches. He hoped that his hearers had the great virtue of being able to bear being told of their faults (hear, hear). The apathy, of which the resolution spoke, certainly did exist in Bristol, but it did not exist in other places, either places having a close analogy to Bristol or in places of a different kind. He had been lecturing in the autumn in Yorkshire at two different institutions, one in the great town of Hull, the other in the ancient metropolitan city of York. In each of those institutions,

just as in Bristol, the lecture room was of that amphitheatrical form, in which the lecturer felt somewhat like a victim thrown to the lions, with a number of people looking down upon him. But both at York and at Hull the number of people who looked down upon him was very much greater than it was at Bristol. In each place there was a thick and closely packed audience. He did not know the reason for the difference : Hull was a town in some respects analogous to Bristol, in other respects opposite to Bristol ; it had a great trade with the east as Bristol had with the west—it was very like Bristol with Clifton cut off from it. Now everybody in Hull had plenty to do, and he was at first tempted to think that it was because the Hull people were all busy people, that they therefore had leisure to attend to other things besides their business. But then he went to York. York was a much politer city than Hull ; it had many more idle people in it ; yet the York people came to lectures as well as the Hull people. What then was the cause that the Bristol people did not go to hear lectures ? He hoped it was not in the air, or in the race or blood ; identified in every way as he now was with the West of England, he would be loath to believe that the men of the North were their born superiors in anything (hear). He did not doubt that every word in the Report was true : there was a constant falling off in the support given to the Institution : the support now given was not what it ought to be, and there had been a time when the support given was much greater. The former part of the resolution was almost self-evident, and Professor Phillips had nearly exhausted the subject. He would insist upon the importance of local institutions, local libraries, local museums, local everything. Do not let everything be swallowed up by London, do not let those things which interested their own neighbourhood be

collected together at some place in London where they would never hear of them again. Let them illustrate their own neighbourhood : everything belonging to Bristol and its immediate neighbourhood was much more in its proper place in a Bristol museum, than it could be in a museum in London or anywhere else. If they dug up a flint head, or anything of any sort whatever, anywhere near here, the proper thing was to keep it in Bristol, and not to send it to some distant place. Everything which the Professor had said in reference to any rivalry between different studies, he would agree to from the bottom of his heart ; as representing one sort of study, while the Professor represented another, he could bear witness to their studies being far from antagonistic. The researches of Professor Phillips were of very great interest and importance to him in the works upon which he himself was engaged of quite another kind (hear). There was room enough for all studies to work side by side, and it was merely an economical principle that they should combine their forces, and do by united effort what probably they would never be able to do singly (hear, hear). As for lectures, probably far too much had been expected from them some thirty years back, but he believed that they had their use. There was something which could be got only from the living speaker. From men like Dr. Guest and Professor Willis, one might learn something which could not be learned from any book (hear, hear). He had always thought, when he came to lecture, that the fault of the lectures was that they were so desultory. Still he had always thought that he should do some good if, out of thirty or forty people listening to him, he could make two or three—not indeed fully understand his subject—but at least feel that it was one of interest and importance, and if he could in that way induce them to go home and try to find out more

about it. If they did this, his coming there would always be worth his while. But he believed that much more than this might be done if, instead of having one day a historical, then a chemical, then a geological lecture, then something about the South Sea or Palestine—if, instead of having things in this desultory way, they could work out any one of those subjects, by trying to have courses—say a physical course, an historical course, or any other courses that might be thought good—then they might really do something. If they had a series of lectures on a given subject they might really learn something. They might not only go thence with the conviction that something might be learned, but they might really learn that something. He had tried to get a scheme of that sort carried out in their own Institution that very winter. He would tell them one reason why it broke down: because the gentleman that he expected most from—a gentleman who had devoted himself specially to the history of Bristol—would not come on account of the smallness of the attendance. He would remind them that their city had a very great history in many ways. There was a certain time when for a few years Bristol was an independent republic, and carried on its government for itself, just as much as Florence or Athens did in other days. There were men who had given their time to the special study of this history. His friend Mr. Hunt, who was known very well in the neighbourhood (hear, hear), and his friend Mr. Green, who was known to their small and select class (a laugh), had deeply studied that history; and Mr. Green, to whom he looked more than to any one else to help him work out the course he had planned, would not come because of the small attendance at their lectures. In Mr. Green they had thus lost the help of one of the most rising and promising scholars in England; but he still believed, if it were supported properly, that by

throwing their efforts into a course they might do some really great things (hear, hear). He did not know much about libraries ; but he went about a good deal in foreign countries, and in every town in France, Germany, or Switzerland, he found a good library and a good museum. Undoubtedly, in France these libraries had had the advantage of being enriched by the spoils of the monasteries. Almost all the books taken from the monasteries in the French Revolution had gone to the public libraries ; but here we had not that advantage. He did not know whether the Dean and Chapter of Bristol had any books ; if they had, he did not wish to rob them. Still, putting that aside, when he went into the splendid libraries which he had seen in many towns on the Continent much smaller than Bristol, and when he saw the way in which they were used by the local scholars, who were constantly producing excellent books on the local history of their country, it did occur to him that there might be with advantage, and that there ought to be, such libraries in all the large towns of this country (applause). Many such local books, by the bye, found spirited and enterprising booksellers in their own towns to publish them. There were the excellent works of his friend, Professor Puisseux, of Caen, all published in his own town. He had that very morning received two valuable works on Norman history, one published at Caen, a town far smaller than Bristol, the other at Valognes, which might be about the size of Wells. There was a time when books were published in Bristol also ; but those days were gone ; London had swallowed everything up. It was odd that we in England, who professed to be so much less centralized than France, should really possess much less of local life : he would not say provincial life, because they were not provincial—England was all one kingdom, and no one part was inferior to any

other part. If they spoke of the metropolis and the provinces, they were bowing down to that big idol of London, which he at least never would bow down to (hear, hear, and cheers). They were not provincial, but they were local, because their work was to illustrate one particular part of the country, and not the whole country. He would not trouble them with much more talk, as more distinguished persons than himself were about to speak; he would only express his mingled pleasure and regret, and say that he had now gone on for several years talking to some of them, and was quite ready to do the same again (applause); only if a few more people would come to hear him he should be very much obliged (hear, hear). He ended by seconding the resolution.

The motion was then put to the meeting by the Mayor, and carried unanimously.

MAJOR GENERAL SIR HENRY RAWLINSON, K.C.B., M.P. for Frome, in moving the second resolution, said he felt that they must have listened with very great interest to the able addresses which had been delivered to them by the mover and seconder of the first resolution. Those addresses would have been of value and importance coming from any quarter, but they were of more importance coming as they did from gentlemen who had such extended practical experience in university education. He could not lay claim on his own part to any such authority; he had really no authority whatever, but that which came from common sense and common observation. He learned from common sense and common observation two brief lessons; he learnt in the first place that a general knowledge of the arts and sciences was a most essential element in the prosperity of nations, both moral as well as material (hear, hear);

and he learned, in connection with it, that it was the duty of all citizens to foster and promote institutions which had that end in view (hear, hear). The second lesson which he learned, and which related more particularly to the resolution that had been confided to him, was this, that where there were two branches of knowledge, or two bodies representing such branches of knowledge, which were dependent upon each other for mutual illustration, it must be to their mutual advantage to be united (applause). Now, that "Union is Strength" was an old axiom, and of universal application; but in a case of this sort it appeared to him that union was much more than strength, for it called into activity—it almost created—advantages which before did not exist, and it gave a symmetry and completeness to what before was one-sided. To make himself intelligible, he would refer especially to the subject that they were now considering, viz:—the Bristol Philosophical Institution and the Bristol Library. A library without a museum, or a museum without a library, however well such might be organised, was really a defective institution (hear, hear); each one was deficient in that particular requisite which was furnished by the other. A very apt illustration, as it seemed to him, of this subject might be afforded by the discussions which had been going on for some time past—as many of his friends would remember—with regard to what was called the disruption of the British Museum. They were perhaps all of them aware that our national collections had for many years past completely outgrown the capacities of the building in which they were placed, and that there had been accordingly a great outcry for increased accommodation. It had proved exceedingly difficult to furnish that increased accommodation on the spot, and consequently there had been much pressure in many quarters to dissociate the

books and the national collections—the collections of specimens of arts and sciences. But all men of science, he believed almost unanimously, had set themselves resolutely against any such disruption; they had maintained that it was indispensable in the interests of knowledge, that books which related to the arts and sciences should be placed in immediate relationship with the specimens and collections which illustrated those subjects—that they should be in the same building, and under the same management (hear, hear). He was not going to enter into the details of that discussion, but up to the present time those arguments had proved successful, and they were very applicable to the matter which they were now considering. The proprietors of the Institution and the Library thought that it was of the utmost importance that the books which treated of the arts and sciences should be in the same building and under the same management as the specimens which illustrated those subjects (hear, hear). He had been given to understand that the Bristol Library and Philosophical Institution, admirably organised, had been living for a long period now, in what they might call single blessedness (hear); they were not in the hey-day of youth, for they had arrived at a respectable age of maturity, the one party being nearly a hundred years of age, and the other about fifty; and it was now proposed that they should be united in holy wedlock (hear). He was told that a very comfortable house was being prepared for the reception of the happy couple, and they were met there that day to offer their congratulations on the event, and to wish them health and happiness; and he thought they might confidently predict that the fruits of this auspicious event would be a more general diffusion of scientific knowledge and educated intelligence throughout the neighbourhood

(applause). Before he sat down, he might perhaps be allowed to say a few words in explanation of his appearance at the present meeting, because, as he had not the honour of being a native of Bristol, and had taken no prominent part in the educational movement which was now attracting general attention, it might hardly be understood why he should have ventured to appear before them on this occasion. The fact was, that although he had not the honour of being a native of Bristol, he had been connected with this city from his very earliest years. The first school he ever attended was in Bristol, and was formerly kept by Dr. Pocock, on St. Michael's Hill, though he could not say whether it was in existence now; the first lectures he ever heard on scientific subjects were delivered in the Philosophical Institution (hear, hear); and it was in the house of a near relative in Park Street, who was one of the founders of the Institution, that he was first thrown into the society of scientific men, and that he first imbibed that taste for study and research, which he was proud to say had been one of his chiefest enjoyments during a somewhat active and chequered life (applause). It was under these circumstances that, retaining a feeling of great respect for the old Philosophical Institution, which was the wonder of his boyhood, and feeling an interest in its fortunes, he was only too proud when he had the honour of being invited to attend that meeting, to accede to the invitation, and to give any assistance in his power by taking a humble part in the proceedings (applause). He had only in conclusion, to propose the second resolution, which was to the following effect:—"That in the opinion of this meeting the proposal for the union of the Bristol Institution and Bristol Library, and the erection of a new building in the Queen's Road for their reception, is calculated to render them more popular and

more extensively useful, and that such proposal is cordially supported by this meeting" (applause).

MR. CHRISTOPHER J. THOMAS, of Bristol, said however much he might feel honoured by being invited, as in some degree a representative of the manufacturing and trading classes of Bristol, to aid the movement now going on for the fusion of the Philosophical Institution and the Bristol Library, he assured the meeting that he appeared before them with great diffidence, and with regret that circumstances had thrown the seconding of that resolution into his rather than into much abler hands. However, they were fortunate in having the distinguished gentlemen he saw around him to aid them in that movement, and they must all feel that they interpreted rightly the general feeling of the promoters in the matter (hear, hear). Sir Henry Rawlinson had told them in a very interesting manner, how much his early education was aided by the assistance of the Philosophical Institution. He (Mr. Thomas) came to this city himself a good many years ago, as a young man and a stranger, to settle and trade in Bristol, and he could only say that the power to attend the lectures and visit the museum of the Philosophical Institution, had been a great aid to whatever degree of self-culture he might have been able to attain (hear, hear). He felt that the power of attendance at the Institution would be a great assistance to his children; and feeling that this must be common to many of them, he would call upon his fellow-citizens to aid heartily in the effort that was now being made (applause) to raise an adequate sum for the erection of the new building. It might not be so well known to strangers as to those who resided here, that during the last thirty years the residence of the middle-classes in

Bristol had been almost entirely changed. People who used to live below the hill, and more on the side of the hill, and in the vicinity of the Institution where it was now placed, had all removed up the hill, and they felt an objection, although the distance might not be very much increased, to going down the hill to attend the lectures. He heartily agreed with Mr. Freeman in what he had said on this subject of lectures, and had himself regretted very often seeing so small an attendance as they got at the very able and interesting lectures which were delivered at the Institution; but, as was stated in the report, the lecture-room was an inconvenient and a dingy one (hear, hear), and not a pleasant place to sit in. He hoped when the Institution was removed to the top of the hill, and they had a more cheerful and commodious lecture-room, that it would be a great deal more fully attended than it had been for many years past (hear, hear). In appealing to his fellow-citizens in trade to aid this effort, he would also appeal to another large and increasing class—those persons who came to reside at Clifton, but who were not connected with the trade and commerce of Bristol (hear, hear). He believed when the Institution was removed to the place which had been fixed upon for its re-erection, that the classes he had named would use the Institution and the library more than they had hitherto done. He quite agreed with the very able and succinct report which they had heard read, in believing that the fusion of the Institution and Library would be the means of strengthening both institutions (applause). They had had some amount of opposition to the scheme for the removal and the fusion of those institutions, but it had not been much, and not more than they might reasonably expect. When changes took place, it was naturally to be looked for that some persons disliked and resisted them, and it was a part

of the English character not to make those changes until the reasons for them were fully proved. He hoped that the small minority who had been in opposition to the great majority of the shareholders, would see that the effort now being made was so largely and so zealously supported that they would fall in with what was proposed (applause).

The MAYOR having put the resolution to the meeting, it was carried unanimously.

MR. HENRY COLE, C.B., Secretary of the Science and Art Department, and Director of the South Kensington Museum, said the first resolution was of a dolorous character, followed by eloquent speeches. The resolution which had been entrusted to him was of a more hopeful kind, to be followed, he feared, by a somewhat dull speech. The resolution which he had to commend to their attention was as follows:—"That this meeting desires that the benefits of the united Institution should be extended as widely as possible for the promotion of scientific education, and approves the suggestion of the Committee that the museum should be open to the public, free of charge, upon certain days of the week, and that regulations should be adopted with the view of admitting to the library, either gratuitously or at a reduced subscription, students to whom the ordinary rate of payment might be an obstacle." They would see (Mr. Cole said) that there was a good deal in this resolution, and that it had two or three separate points for consideration. He thought it his duty, in accepting the invitation of the Committee, to come to Bristol on the previous day, in order that he might, if possible, somewhat acquaint himself with the complaints of the patient. The Dean of Bristol was so kind as to take him to the Museum and

the Library. Upon the matter of the Library he had little to say, but upon the subject of the Museum he would venture to make a few observations. He was put in charge of one of the honorary secretaries of the Museum, whose ancestor, he believed, was one of its principal founders—he alluded to Mr. Sanders (applause), who kindly took him over the premises. He (Mr. Cole) found the museum in Bristol something like another old institution already alluded to—the British Museum, containing many “things rare and curious.” The British Museum, established a century or more ago by means of a lottery, was found to contain “things rare and curious:” such was the notion of a museum a hundred years ago. Their museum he also found to contain “things rare and curious.” He found the walls covered with the implements of savages; he found one or two specimens of valuable pottery; and a mummy. He found a quantity of butterflies and insects; some reptiles in bottles; a collection, more or less, of natural history scattered about; and a very admirable, complete, and perfect collection, as far as his judgment went, of geology and mineralogy. He was then taken through a number of small passages, which certainly would not accommodate great crowds of people going there for the inspection of those objects, and he was informed that the Committee had great pleasure in admitting the working people, but that really it was very costly, as they had to engage additional attendants, to keep them in the right way, and prevent them tumbling one another over the bannisters (cheers). He was taken through these passages down into the cellars, and shown a number of what he was told were valuable scientific instruments—air-pumps of great value, which had not been used, heaven knows for how long (a laugh). He was shown heaps of cases, which he was informed contained skeletons and skins,

and that nobody dared to touch them (cheers). With a candle they made their way through these cellars, where all these treasures were buried, and they held, as it were, a little council, four of them—Mr. Sanders, Mr. Ponton (curator of the museum), the attendant porter, and himself—and they went into the different points which seemed to bear upon the diagnosis of this case. They came to unanimous opinions upon the subject. They agreed that more space was wanted, that more light was wanted, better organization, more responsibility, and finally more money (applause and cheers). They also came to the opinion that if they took the institution exactly as it was—he meant the contents of the building—they might be very greatly improved ; but there could be no doubt at all that even if they left the collections just as they were, they could make them infinitely more accessible and useful to the citizens and visitors by putting them into a better building (applause). He had no hesitation, therefore, in saying, “Set yourselves to work to provide a better building” (hear, hear). He was told it was impossible to get sufficient space on the present site, but they might, he was informed, obtain that space at a new site on the top of the street. He had been invited to offer any suggestions to them upon this subject, and as he was their servant in London, and paid to look after their interests, he hoped they would take his remarks as if he were completely free from any prejudice in the business. He feared, then, that he could not quite concur in some principles which had been laid down in their utmost breadth, although in spirit he might agree with them. First of all, before they determined anything, he should say, whatever they did, let them follow the precept: “whatsoever thy hand findeth to do, do it with thy might” (hear, hear). Don't let them have a mummy, and a bit of pottery, and

an old jar, and a few ethnological implements, which came in by accident; but if they determined to have a museum of any character at all, let them try and develope that character to the utmost (hear, hear). He heartily sympathized with the speakers on the first resolution, that they should attempt to do in Bristol what the metropolis could not do;—that was, to represent the natural history of the county and the neighbourhood (applause). If they intended to have a natural history museum they should make it a perfect natural history museum, one to which people must go if they wished to learn the history of Bristol. It should not be an “omnium gatherum” of skeletons and moths, as it were, but it should be what it might be, a complete thing of its kind. He would say thus much upon the question of natural history. On the previous day he went and looked at an institution which they had in Bristol, from which he derived great pleasure—that was their Zoological Gardens. He was struck with the order and excellent management which those gardens displayed, and particularly interested in watching the gambols of three beautiful young lions and their mother. It was an admirable and very amusing sight to see. It was certain that the first condition of a natural history museum—whether a local or a general museum—was to have plenty of space (hear, hear), and accordingly he must tell them in all humility, that if he had to make a natural history museum for Bristol, his first business would be to find a site with plenty of space. They talked of erecting their institution at the top of Park Street, but he was quite certain that if they intended to have a natural history museum of as ample and complete a character as they ought to have, they would not have ground enough on that spot. His advice to them would be—it

might be under the same management if they pleased—to found their museum at a place to which they might be able to attract thousands—he meant at the Zoological Gardens. He needed not to say much in favour of a natural history museum, because he really thought it was one of the most attractive sights they could provide for the people. If he went abroad he found that almost every little wretched town had its museum, and especially its natural history museum. He therefore said to them, “Don’t be behind a little town of five or six thousand inhabitants, such as you meet with in France or Germany, and indeed throughout Europe, but have your natural history museum, and make it worthy of the place (applause). And then having got it they should popularise it; and try to get the masses of Bristol, who he was sure did not frequent churches too much (laughter), to visit it. They must try and induce them, by giving them all the facilities they could, to visit this natural history museum. He was quite certain they could make people religious by means of a natural history museum, and lead them to churches. Of course one of the conditions to get the people to a natural history museum, was to make regulations that would enable them to visit it. In London they had a leisure day, which was known as “Saint Monday,” and perhaps they had a Saint Monday in Bristol (laughter). If Monday was the most convenient day in Bristol, they should open the museum on that day, and make an arrangement, if possible, to open it in the evening. They should open it—they would excuse the freedom with which he spoke (applause)—like Kew Gardens, and Hampton Palace, and the Zoological Gardens, and the Botanical Gardens, at Dublin, and then he thought they would find it would be frequented by hundreds of thousands of people. He was accustomed to receive

from Dublin returns of nearly 300,000 people going annually to the Glasnevin Gardens, at Dublin. He would recommend the Committee of the New Bristol Institution to look at the natural history museum from that point of view. He assumed that they were going to have the building, and he assumed that the library would be in it. It was indispensable that they should have a new building, and their project, as he understood it, was to couple with it a certain amount of lecturing. He confessed he had no great faith in *dilettante* lectures. He was sorry to think with regard to the lectures that they would prosper no more in the new theatre than in the old one. It was a disagreeable thing for him to say, but he was bound to tell them his conviction, and that was that the Bristol Institution would not be what they desired it to be if they allowed it to rest simply upon accidental lecturing. He had not a word to say against the library. His suggestion would be to make it as useful as possible, and to extend it as much as possible, in accordance with the resolution before them, but he thought they would have to go very much further with instruction if they wished to make their institution successful. In the report that had been read to them he found this passage, "The claims of their undertaking, in connection with the great cause of education, they leave with confidence to the advocacy of the distinguished men who have kindly consented to address the meeting." Now for himself he should have thought that he had very little business there to address the people of Bristol on the question of merely building an institution and library. He believed that in their institution and the library attached to it, they had the basis of a great educational movement. He might say that he was not accustomed to make many public speeches, but he could not avoid expressing his sense of the

gravity of the situation of England at the present time. A few years ago they were all in a state of alarm at the prospect of being invaded, and they set about creating a volunteer force. If they would believe him they had a much more serious invasion going on now—they had the invasion of manufacturers in all parts of Europe competing with them. If there were any ironmasters present they would admit how closely France, Belgium, and Germany were treading on their toes. Surely we are not behind the French in iron! Why every twenty-third man in England was a smith—by name at least (laughter). It was a fact that for centuries the Englishman had been hammering iron. The department with which he was connected was erecting some new buildings at Kensington, and it took a contract for iron girders from a South Staffordshire ironmaster. There was a little delay in the delivery of the girders; and after enquiries, it was found that they came from Belgium, and he believed the greater part of the rolled iron of this country came from Belgium. In England they had the iron and the coals on the spot, and yet they had this fact, that the Staffordshire ironmaster could get more profit by getting his iron from Belgium than by making it here. No doubt there were causes for it, such as strikes, wages, &c.; but it was a fact that the people in Belgium were much better educated than they were in England. Let them go into a Belgian factory and see how many of the workmen could read and write, and then into a Bristol factory, and ascertain the same fact, and then they would be able to perceive the difference. Let them go to a foreman in Belgium. He was a man who, perhaps, had spent five years of his life in getting some kind of technical instruction as to how he could turn his experience to the best possible account. Then they found the masters' sons

who looked after the work in full knowledge of the work, and not as they found them in England. The continental master's son was not a man as with us who had gone to Oxford or Cambridge, and who knew nothing about iron. Belgian manufacturers were beating English manufacturers upon the ground that they knew more about it than the English did. There was no disputing the fact that the iron to which he had alluded came from Belgium, and he believed that the question of technical instruction had very much to do with it. Let them go from iron to wool. The English with their enterprise brought wool from Australia, and they actually exported it to Germany to be made up into cloths, and then took it to Leeds to be dressed after English tastes. It was ridiculous that they should do that kind of thing. Then as regarded the question of silk, they actually sent silk into France to be dyed, and then it was sent back to Nottingham to be spun. The reason was that they could not dye the silk in Nottingham. Yorkshire was the first place into which locomotives were introduced, but they did not make the tires of their wheels—they sent to Prussia for them. It was a fact that Messrs. Kitson and Messrs. Stephenson, actually having the iron, and the coal, and the workmen, and the capital on the spot, found it more profitable to send to Prussia. It seemed to him quite amazing. And then what did they see in Paris? They might have seen a locomotive at the Paris Exhibition ticketed by the firm of Messrs. Schneider, as a sample one of forty they had made for the Eastern Counties Railway. There was the whole thing: they (the English) being the inventors of railways, allowed the Frenchman to come in and take the matter out of their hands. Of course it was all in the way of trade, and he was not for putting any protection upon our locomotives except the protection of intellect (applause). He thought it was an utter shame

to allow those things to go on and make no effort to remedy them. Then there was another illustration. The little state of Würtemberg was not perhaps bigger than Bristol, and yet Stuttgart competed with English manufacturers of locomotives, and beat the English in sending them to the East Indies. They took the pattern of the English locomotives, simply copying them, and then by economy they took away the contracts from the inventors of locomotives, and carried them off to the English possessions in the East Indies. He hoped they would be a little impressed with those facts, for he was persuaded that they would be able to turn them to good account in Bristol. They all read the papers—in fact it was the only thing they could read now-a-days (laughter)—and in that very day's paper what did he see? First, that Mr. Edward Ellice had been proclaiming his views upon national education and technical instruction; and then that in Yorkshire Sir Francis Crossley, Mr. Akroyd, and Mr. Stansfield, had been doing the same thing. And again, he read of Mr. "Tom Brown's"—Mr. Hughes's—opinions upon the matter. Next he came to a gentleman who could not be said to entertain extreme views—he alluded to the new member for Westmoreland, Mr. William Lowther, and he would ask them to listen to what he (Mr. Lowther) said. He said a little about elementary education—"The word 'compulsory' is a word we don't like much in England, but it sounds worse than it really is. It means merely that parents are obliged to teach their children to read, and write, and do arithmetic between the ages of six and fourteen. That is no great hardship. However, there exists in Prussia a law which forbids a man to build a house which is not within reach of a school. That is not a great hardship. Owing to this system of education in Prussia, I believe it is that we now see Prussia, more

particularly—I believe we may now say Germany, because they are almost one—occupying the prominent position it does in the affairs of Europe. The Germans are to be found in various parts of the world, steady, thriving, making money, and returning to their own country again; and this is owing to their education. In 1866 you read of the war carried on by the Austrians and Prussians. It only lasted a short time; but in that time everything turned out to the advantage of the Prussians—very contrary to the expectations of many people. When that war was over I had opportunities of asking those able to give an opinion upon the subject, and they attributed the great success of the Prussians to their education. It instilled a spirit into the army which could not exist without it. It may be said the head of the Prussian Government was a man of unusually great abilities—that there were generals capable of undertaking any task—that the organization of the army was good, and so forth; but I believe the great secret of it was education; and it gave that minister, those generals, and all the people under them, tools which they could make use of, and which they did make use of, and it prepared those men as nothing else could have prepared them. I will give you one single fact which you may remember and think over when you return home. In the Prussian army, consisting of 300,000 men, there were not ten men who were unable to read and write.” What, remarked the speaker, could they say of their own English army? What was the percentage there? He believed it would be found that nearly 60 per cent. would not be able to read and write. Mr. Lowther went on to say—“There exists also in Prussia what are called technical schools, which I hope we may see also introduced into England with success. It is a subject which must cost much time, much consideration; but I am

convinced that the time for its consideration, and the money spent upon it, will be well expended. There exist in many towns in Prussia technical schools, which, to their honour be it spoken, are self-supporting. The Government gives but little towards them, and professors are found who will come and lecture in these schools for nothing. There are also museums, where you have opportunities of seeing drawing, and facilities for pursuing every branch of study which you may wish to follow. In Prussia a man of one trade is not satisfied that he should follow that trade only, but he gives his mind to other trades in immediate connection with his own. In these schools drawing, building, architecture, plans, land surveying, and whatever may be suitable to man in any station of life may be learned, and you will always find the Prussians anxious to make use of those means of education which are put in their way. I hope we may some day see these schools established in England, for depend upon it, if we don't we shall find ourselves left behind, and that will never do." The speaker proceeded to say that he had come before them to try to woo them into doing something for their Bristol Institution. He was happy to have it in his power to say that Government—Her Majesty's—was fully alive to the necessity of scientific instruction (hear, hear). They must not think that he was altogether wandering from his text. The first phrase of the resolution was, "That this meeting desires that the benefits of a united Institution should be extended as widely as possible for the promotion of scientific education," and he was going to ask them to consider that. Whilst they did it for the benefit of scientific education, they would do it for the benefit of those ladies and gentlemen who went to the *dilettante* lectures as well. In December last the Duke of Marlborough, as Lord

President of the Council, signed a minute to this effect : "The Science and Art Department will make a grant of £25 per annum to the managers of any school or educational institution, or any local committee formed for the purpose, who will raise the like sum by voluntary contribution for the maintenance of a student at some college or school where scientific instruction of an advanced character may be obtained. The exhibition may last for one, two, or three years" (applause). If therefore any gentlemen would send any lad in whom they might be interested, he (the speaker) should consider it his duty to place their application before the Lord President of the Council, and no doubt he should have the pleasure of signing a cheque for the student (applause). He hoped, however, that instead of Bristol sending any of those young men out of the city—as he supposed would have to be done for some little time to come—her citizens would consider it their duty, on behalf of the West of England, to educate them within her own walls (applause). They had nothing to do but to organize the Bristol Institution properly : they had only to create the necessary professorships for the necessary instruction—a professor of mechanics, a professor of chemistry, one of physics, and one of natural history—and send their students, and the Government of the country were prepared to pay one half the expenses for them. Now he said that Bristol *must* do this (hear, hear), and he was quite certain if he could look into the future, that they must have five or six great centres of technical instruction in England. Manchester and Leeds were doing something of the sort, and it was a question whether there should not be something of the same kind started either in Birmingham or Nottingham. Did they tell him that they would leave Bristol unprovided in this respect, and that their manufacturers and mer-

chants were going to send their children away from the locality, when they could do the work so much cheaper in Bristol? He did not believe it for a moment. He would tell them that if they only revived their Institution and provided proper premises and attached professors to those premises, they would be doing a work which would be of infinite importance to themselves. He did not say it from any local point of view. They would have to educate their children and place them in the learned professions and make them manufacturers and so on. They must also train those who were going to manage works in Gloucester and Stroud, and South Wales, and places of that sort, and must provide proper instruction for them. He had been reminded that in Bristol they had a Trade and Mining School. He congratulated them upon that, and was happy to say that it took in competition a good deal of money from his department. But that was not the present subject. Boys left that school at twelve and fourteen years of age, and there ended their education. What he was contending for was an institution where young men of seventeen or eighteen years of age could go and study for three years, and take a systematic course of instruction, just as a young surgeon walked the hospital, or a clerk was articled to a lawyer. They must do for industry what was being done for the professions, and they must do it in self-defence. They must do what Prussians, and Frenchmen, and Belgians did—they *must* do it. He did hope they would accept the invitation of the Government. He wished it to be known, that whether they had their Institution enlarged or not, his department was prepared to give on behalf of any artizan, to be a manufacturer, £25 of the public money; and it might be sent him where he liked—either to his friend Dr. Acland's university, or to Dublin, or to London, or anywhere else.

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They might send the student to one of those places for two or three years; but he did earnestly hope that ere long they would be in a position to educate them themselves. He should say, in laying out their plans for that work they must provide a good laboratory. He had heard that they already had an excellent laboratory. They should also get several class-rooms, where they could carry on technical instruction. He was quite certain that three years hence they would have to make that provision, and he would recommend the committee to make arrangements for having a good lecturing theatre and class rooms, and what he was recommending would be good for their *dilettante* lectures. Then if they had good professors at these classes, the young ladies in the numerous schools about Bristol would come all the more if the business was of a useful class, instead of dropping into a bit of history one night and a bit of chemistry another. And if a course of lectures was adapted for popular instruction, no doubt the people would flock to them. Old people did not like to leave their firesides to go and listen to a lecture, and that was one reason why eloquence did not receive its reward and wasn't attractive; but at the same time there was a great desire on the part of young people for instruction. They would have there students' lectures for the schools, as well as accidental lectures; and they would have no doubt a course of lectures specially adapted for citizens, which should be given in the evening. He felt bound to call the committee of the Bristol Institution to account, for in the report he found this passage, "If we look to other places where such institutions as those now before us, are maintained with spirit, it must be confessed that our community exhibits a peculiar apathy in regard to the importance of maintaining amongst us adequate means of facilities

for literary and scientific culture." He proclaimed that it was a libel. He would not confess that Bristol exhibited a peculiar apathy towards scientific culture; on the contrary, his conviction was that Bristol with its history of centuries, with its conservative traditions, with the wealth of its merchants, its intellectual intelligence, and its patriotism, did feel the importance of scientific culture as vividly as any other part of the Queen's dominions. There were scores of men in Bristol, who if convinced of the importance of scientific culture, could and would in a few hours provide the necessary funds. If this conviction be not brought about; if the Dean in his pulpit in the Cathedral, if the Mayor in the Guildhall, if the Master of the Merchant Adventurers, if their Mileses and Gibbises were not awakened to manifest their sense of its importance, the responsibility must, he feared, rest not so much upon them as upon those individuals who had undertaken the revival of the Bristol Institution with its Museum and Library, and especially upon the incompetency of the present speaker to make out the case successfully (loud applause).

DR. ACLAND said, that whatever difficulty he might have felt in presuming to address them on the serious subject before them, they could readily understand that this difficulty was very materially enhanced by what had fallen in so able a manner from Mr. Cole. The ability, and gravity of his observations, were no more than they had a right to expect from a gentleman of his known extraordinary energy, holding so important a position in Great Britain at this moment (applause). He considered that whatever the gentlemen of the Committee might have desired in requesting his attendance there that day, they were partly moved by the knowledge that he had been from childhood intimately connected with the

West of England, and that if he had anything of the West-country man in him, he must have always had an admiration for the greatness, the philanthropy and many other circumstances belonging to that commercial metropolis. He thought also that it might possibly be because in the position he held in one of their ancient universities it had for many years been his duty to advocate the very kind of measure which they had come there to-day to consider (hear). As Professor Phillips had kindly and generously said, they had now in Oxford an educational institution which, he believed, was worthy of a national university (applause). Their children could now come and learn the fundamental principles of the Natural Sciences with as great convenience and advantage as at any other university in Europe (hear, hear). On this point he hoped that they would come and judge for themselves (applause). He ventured to say that one or other of those two reasons might have in their great kindness induced them to ask him to come, but Mr. Cole's speech led them into wider questions. The proposition now before them had been moved by one of the most active of men, the head of one of the most important of modern English institutions—an institution which at present was exercising a great and serious influence for good or evil over the destinies of this country (applause). By a strange coincidence, the person who was to second his remarks was one connected with the ancient and supposed to be behind-hand universities (hear, hear). Whatever other qualities a man who ventured to speak on such an occasion might possess, he ought to have the quality of being an Englishman. It was his duty to the audience assembled for a great and important purpose, as well as to himself, not to conceal his sentiments (hear, hear). By an accident it had fallen to his lot to pay long continued

attention to the special subject touched on by Mr. Cole. This being so, he was happy to be able to say that he cordially endorsed what had fallen from him. It might be a matter of little moment to Mr. Cole whether a representative of one of those universities approved of his speech or not, but it was a matter of deep significance to them that he should be supported by one who, from a different point of view, believed that he had not in the slightest degree overstated the importance of the case (applause). He dare say that matters had taken a different turn from what was expected, but the truth had come out. It was no matter of *dilettante* work at all they had to consider to-day. It might have been a matter of opinion formerly—whether in great towns, in great places of commerce, in great centres of population, places remarkable for wealth or size as the case might be—it might formerly have been a matter of choice whether culture of the highest kind should be aimed at or not. He was not so weak as to say that this was a question of national existence: but laying claim to no more than the average common sense of an ordinary observer of what was going on about him, and having passed the middle of life, he did say that it was a matter of either maintaining their position among nations by intellectual progress, or losing their place (applause). He could never forget the shock he received whilst a boy, when being for his holiday in the Mediterranean, he found that in Greece and Constantinople, when he wanted to buy a knife, a pair of pistols, and a double barrellled gun, he did not buy English ones because they were inferior to the German and French. That was in 1837, thirty years ago (hear, hear). He wrote home on that point to more than one member of the House of Commons, and said that having been brought up to believe that English manufactures were superior to those of all other

countries—he found that it was not the fact: or, which was more grievous, that being able to make the best, we often exported what we knew to be bad. He had often pondered on this, and thought what must come of it: he had seen public opinion gradually awakening to it, and he saw now that there were indications of the evil reaching a pitch which the national mind felt to be intolerable (applause). Now for the remedy. He entirely agreed upon the whole that the remedy of this grave matter depended on the progress of Education (hear). By God's providence his work lay in a place of education, and he was thankful for it, because he was delighted to think that in any public work which out of his own proper duties he was able to do, he was really assisting in what he believed to be of vital consequence to the country at large, and that any little thing done for the improvement of the culture of the country was so far a national gain (applause). He was bound to say that what he meant by education, was not to be limited to what Mr. Cole properly called technical education; he should think that he was betraying the trust reposed in him, if he were not to state briefly his real sentiments upon this. No one could possibly value more than he did the advantages of scientific education, either for training certain faculties, or because it of course lay at the root of all mechanical improvements. If their workmen were to vie in intelligence with the knife workers and metal workers whom two years since he visited at Namur, they must understand the processes in which they were engaged. But that was not the whole secret of the success of those men. They must go and see their abstemious habits, go and see their domestic lives, go and see their tenderness to their children and their anxiety for their children's instruction, and then tell him if it was their scientific culture alone which tended

to their success (applause). That was a very serious matter, and if they proceeded to educate themselves or their fellow-men they must not proceed on wrong principles. If Mr. Cole thought that the South Kensington Museum would do all that England wanted for the purposes of education, Mr. Cole would find that after all his eminent labours something more had to be done (applause). Mr. Cole, however, was not a man to undervalue general education. Nor do those who urge general cultivation undervalue the advantages of the South Kensington and other Schools for promoting the art and science education and technical instruction of the country. They only say something more was wanted (applause). There was only one other remark arising out of the question before them which he would venture to make. He thought it was of great consequence to keep up the literary character as well as the scientific character of the institution they were now re-founding. One reason would seem to be that men are becoming—he was sorry to say—unnecessarily divided in opinion as to the mode of training youth, and unnecessarily tender in discussing education under the religious aspect of the question. This was a great misfortune (hear, hear). Some people honestly think it is better not to argue—better to gloss over differences which are supposed to exist between science and religion. They might think it was better to hold their tongues. Well, he doubted it (hear, hear). He had had many opportunities, in connection with other men, of observing what was going on, and he was of the old English mind—he would rather have the matter out (applause). He would rather have both students and teachers facing the question whether men had souls as well as bodies fairly and openly, than behind the scenes (renewed applause). They need have no fear of truth (hear, hear); they need

have no fear of science, they need not have any fear of religion (applause). That God is, is what men must believe, if they believe anything. One way of preserving that feeling, which existed in all pure and good minds, was to keep the fair harmony of our faculties carried on, educated, simultaneously in the mental science as well as the physical science. This we desire for our children and our children's children. In a matter of this kind, people who were past the middle of life had better cease to think about themselves; they had better consider what was the influence which they desired to perpetuate for their children and for the future of their country (applause). The time of most of those who were now addressing them for altering their own fortunes was past; but what was vital to all of them was to think—not whether the *dilettante* period was a good one for England fifty years ago, not exactly whether their Institutions did their work then as they should, or whether they were doing it now—but whether they were preparing their children and their children's children for the struggle and competition, both intellectual and material, which must come between this country and all other civilized countries on the face of the globe (applause). Only this they would permit him to add to that sentiment—and it was one which they all felt—that they might grieve over this kind of competition and struggle of mind, if they believed that by it they were injuring any part of the human race. But what was good in England was good out of it. If there were anything fundamentally true in the principles of free trade—which of late years had been so keenly advocated—this was true: that the free trade and progress in Science which helped the happiness and prosperity of England, would also in the natural course of things help the happiness and prosperity of the world (applause).

That being so, he would venture to second the resolution, which he would read in order to show them that he had not travelled beyond its precincts. The desire of their much esteemed Committee to extend the benefits of the united Institution "as widely as possible," meant of course to all classes of persons (applause). The whole resolution meant in other words, that whereas formerly an institution of this kind was looked upon as a sort of proprietary right for a special class, the Committee were desirous of carrying on all the blessings (he must call them) and all the advantages of complete and combined literary and scientific culture, not for one class of society only, but for the whole of their fellow-citizens (loud applause).

The resolution, on being put, was cordially adopted.

DR. SYMONDS, of Clifton, on rising to propose the next resolution, said he should detain them but a very few minutes, because of the lateness of the hour, but he was sure that they would feel with him that the motion he had to propose was one that ought not to be slurred over or treated in a mere perfunctory manner. It was a resolution, he ventured to say, that every member of that audience would be delighted to propose. It was a vote of thanks to their distinguished visitors (applause). They must feel that if those eminent gentlemen had merely been present with them, their presence would have conferred grace and dignity on the meeting (hear, hear), even if they had taken no active part in the proceedings; but after the thoughtful and eloquent and highly practical speeches which they had listened to with so much delight, they must all agree that all that could be done by words to promote the scheme before them, and all that could be done to stir up their languid zeal and stimulate

them to renewed exertions, had been done. He trusted that a new era would date from that day, that it would be a true renaissance—not such an abortive renaissance as was attempted some eighteen years ago, and then again some ten years afterwards, but that it would be a real revival. He might be allowed to say that in the origination of that meeting, and in the scheme for re-constituting and rehabilitating their institutions, he could not claim the credit of having had any part; so that if, as he most fervently trusted, that meeting should be a great success, he could not partake of the glory, and if, which Heaven forbid! it should prove a failure, he should not be answerable for the disgrace. But if disgrace was to be spoken of, he was sorry to say that he could confirm what had been stated by the eloquent gentleman on his left, that great disgrace had been already incurred by the community in which they lived in allowing the decadence of at least one of their institutions. He could not agree that the supporters, the committees, and the secretaries of that institution were answerable for the disgrace; it rested with the public (hear, hear, and applause). He could testify that the labours of those gentlemen had been wonderful. He had wondered from year to year at the patient, cheerful perseverance with which they had endeavoured to enlist the sympathies of the public in behalf of the Institution. By their incitement gentlemen of great learning, great eloquence, great attainments, had from year to year at that Institution delivered admirable lectures; and notwithstanding something that had just been said, perhaps slightly, of *dilettante* lectures, he would venture to say that even in this winter's session there had been lectures delivered at the Institution that would have done honour to the science of the London Institution, or any institution in the country (applause), and to the literary character of any society of literature in the

kingdom (hear, hear). But he did trust that this was to be the beginning of better things. The Bristol public had now an opportunity of retrieving their character, and it would be a deep disgrace if after such a meeting as that there should be no permanent result. Should it have to be said that all those eloquent voices had been raised in vain? Should it have to be said that the illustrious visitor whose name would go down to posterity as the exhumers and decyphers of the science and letters of a people dead and buried more than two thousand years ago—should it have to be said that though he by his genius, his intuition, his learning, and his marvellous labours, conducted often under burning suns in the East, brought back to them the life and spirit of the old Babylonians, yet that he could not resuscitate them, Bristolians? (hear). Should it be said that celebrated professors from one of the national fountains of instruction and knowledge—acute and brilliant historians and reviewers, renowned organizers of national institutions of art—should it have to be said that they poured the light of their talents, their wisdom, their experience upon them, and that all that warmth and light could bring no vital heat to their decaying and almost perished intelligence? (hear, hear). Would it have to be written in the future annals of this city, that certain of the Athenians came out to them, and proposed to them and encouraged them to raise a temple to Pallas, if not so grand and beautiful in its proportions as their own, yet something like it—but that they left them as they found them—impassive, impenetrable, irredeemable Boeotians? Should that have to be said? (applause.) He trusted they would all give it an indignant and emphatic “No!” but the negative must be supported and followed by emphatic action. Great exertions would have to be made: large funds would have to be raised, and he hoped and trusted that the

gentlemen who were forwarding this movement would not move an inch—that not one stone or brick would be laid—until they had promises of sufficient for the completion of the building (applause), and not only for the raising of the building, but for its due furniture and fitting-up; and more than that, that they should have good reasonable security that there would be such support from the public that a due staff of officers would be maintained, and that the institution would be kept up in a state of order, efficiency, and respectability. There must be no more penury and pauperism, no more beggary, no more living from hand to mouth, no more of an existence that was little better than a miserable death in life, ghastly and piteous to behold. If they were to have those institutions, let them be vigorous and healthy, or let them die and be forgotten. He trusted they would adopt the former alternative, and that he was sure would be the best expression of their gratitude to those eminent gentlemen who had visited them (applause)—far better than the mere verbal acknowledgment which he had the honour to propose to them (hear, hear). He begged to move “That the cordial thanks of this meeting be given to the distinguished visitors who have testified by their presence to-day their interest in the promotion of scientific and literary pursuits.”

The REV. WILLIAM JAMES said he had much pleasure in seconding the resolution which had been so ably and appropriately proposed by Dr. Symonds. He was quite sure that he should be carrying the sympathy of his hearers with him, when he said that there was no friend of the Institution and Library who did not feel deeply indebted to the eminent and accomplished men who had favoured them with their presence, and who had shown

their earnest desire to promote the object which it was hoped the meeting would help to accomplish, by journeying to Bristol at that inclement season, as well as by the eloquent words which they had just spoken (applause). Whatever might be the immediate result of this effort, in reference to the work contemplated, of one thing he was sure, that much of what had been said that afternoon would not be forgotten; and he was sanguine enough to hope, that sufficient funds would be speedily obtained for the erection of the building which had been proposed, in which they would find ample space for all the objects of the Institution and Library, as they had been promised for many years—and also for those further plans which had been spoken of by Mr. Cole, should the Committee be encouraged to enter upon them (hear, hear). The promotion of science had peculiar claims upon those who were engaged in manufacturing and commercial pursuits. There could be no doubt that the wondrous advance in material civilization, which characterized the times in which they lived, must be mainly traced to scientific discovery and research. And he would remind them that, in former ages, men of fortune, and men of business, regarded it as a duty, as well as a pleasure, to devote no inconsiderable portion of their means to the institution of schools of learning, and to the embellishment of the cities in which they dwelt. Often when he had been wandering through the towns of foreign lands, his eye had been attracted by some object of art which had, in this way, been set apart for public use, or, as a thing of beauty, to be a joy and delight to succeeding generations. Their own Bristol was not without evidence of the same spirit, in the schools and almshouses which existed around them, and above all in the noble structure of St. Mary Redcliffe Church—one of the most beautiful of the kind in the kingdom.

He might be permitted to say that he knew of nothing,—apart from a deep sense of religious duty—that would be more fitted to exalt and dignify the pursuit of wealth, and the desire of accumulation, and to preserve them from the moral dangers with which they were unquestionably attended, than a readiness to give liberally for the erection and support of academies of art, and scientific institutes, and to bring the productions of genius, and the acquisition of sound knowledge, within easy reach of the masses of the people. He begged again to express their grateful sense of the valuable assistance which had been so kindly given. He sincerely hoped that the time was not far distant to which Professor Phillips had pointed, when the Professor and his friends would come amongst them again, and see the new and commodious edifice finished, and rejoice with them in its dedication to the great purposes to which their own lives and talents had been so successfully devoted. He would not detain the meeting further, at that late hour, than to observe that he most cordially seconded the vote of thanks to the distinguished visitors who had honoured them with their presence and aid on that occasion (applause).

The proposition was carried by acclamation.

The RIGHT REV. BISHOP ANDERSON remarked that at that late hour, and after a meeting which had hitherto afforded them such intellectual pleasure, it would be very wrong in him to detain them with any lengthened remarks. He was sure the meeting would join most cordially in the resolution he was about to place before them, which was a vote of thanks to the Right Worshipful the Mayor for his kindness in presiding over them (applause). His Lordship remarked that having been engaged for many a long year in a part of the

world (Rupert's Land) where knowledge was not easy to be procured, it was a part of his work and his privilege to found a library, and the fact of having been enabled to do so, and so benefit those around him, had often been to him a source of pleasing reflection. He felt he was not out of place on that occasion in raising his feeble voice in defence and in advocacy of such an institution as that which had been planned. He had hitherto taken some part in the Library, but not so much in the Institution. He hoped the two would now go hand in hand, and that very soon they would have a building that would be a credit to Bristol, and that it would be the means of raising up many men of scientific culture—more than at the present time. Bristol had no reason to hide her head with regard to her present position in this respect, and it was his earnest hope that the thing would go on, and that within a very short time she would possess an Institution which would far excel in usefulness that which at present existed (hear, hear).

MR. J. HARE briefly seconded the resolution, which was put to the meeting by the Very Reverend the Dean of Bristol, and cordially adopted.

The MAYOR, in responding, assured those present that at any time during his year of office he would be found ready to respond to the call of his fellow-citizens, if the object sought to be promoted was a worthy one (applause).

The meeting then terminated.

